

## REGION 6 EXECUTIVE SUMMARY

9/5 visit

TOPIC: Louisiana Offshore Oil Port (LOOP), LLC (LA0049492).

DATE: August 3, 2017

CONTACT: Isaac Chen, Silvia Bogdan and Kay Schwab

PURPOSE/ACTION NEEDED: Addition of permit requirement to ensure that no toxics in toxic amounts are discharged via brine water discharged at Outfall 004 (state waters) in the joint EPA/LDEQ issued NPDES/LPDES permit.

DEADLINE DATE: Need to issue expired permit as soon as possible. Need to add new outfall requested.

BACKGROUND: Permit expired 9/30/2013. EPA concurred on the draft permit in 7/2014 which included biomonitoring requirements at Outfall 004; however, LOOP opposed the biomonitoring requirements and the draft was not public noticed. EPA has been working with LDEQ to find a mutually agreeable approach to assess whole effluent toxicity (WET).

ENVIRONMENTAL/PUBLIC HEALTH CONCERNS: Outfall 004 discharges an excess of TDS into Subsegment 021102, Barataria Basin Coastal Bays and Gulf Waters to the State 3-mile limit, which is listed in the Final 2016 Integrated Report of Water Quality in Louisiana as not supporting fish and wildlife propagation, FWP, (fishing), one of its designated uses. The IR lists the suspected causes of impairment as dissolved oxygen and mercury. A TMDL has been approved for mercury. Subsegment 021102 does not have a site-specific water quality standard for TDS, however, an excess of TDS is toxic to aquatic life.

### REGULATORY BASIS FOR REQUIRING WET TESTING:

- Louisiana's LAC 33:IX §1121.B.3, states that "[i]n general, WET testing will be required in the permit for discharges where data are insufficient to demonstrate that any discharge does not or will not contribute to ambient toxicity"
- The Clean Water Act (CWA), Section 101(a)(3) specifies that it is the national policy that the discharge of toxic pollutants in toxic amounts be prohibited.
- 40 CFR 122.44(d)(1)(v): When the permitting authority determines, using the procedures in paragraph (d)(1)(ii) of this section, toxicity testing data, or other information, that a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above a narrative criterion within an applicable State water quality standard, the permit must contain effluent limits for whole effluent toxicity. Limits on whole effluent toxicity are not necessary where the permitting authority demonstrates in the fact sheet or statement of basis of the NPDES permit, using the procedures in paragraph (d)(1)(ii) of this section, that chemical-specific limits for the effluent are sufficient to attain and maintain applicable numeric and narrative State water quality standards."
- The maximum TDS concentration of LOOP's brine is 318 parts per thousand (ppt). Ambient salinity concentration of seawater is 35 ppt. In April 2017, LDEQ provided ambient TDS data of 27ppt (LTA).
- Due to the high concentration of TDS in LOOP's effluent, there is reasonable potential for whole effluent toxicity and therefore, this facility needs a WET control in the permit per federal regulations.
- Maintain consistency within R6 permits and national permits. See Attachment A Tables for information on other permittees that have identical operations (Strategic Petroleum Reserves), or similar discharges (brine discharges).

### TECHNICAL CONCERNS:

- Permittee stated they already conducted a study on the impact of their effluent to the aquatic community back in 1980s and found no detrimental effect, although the continuing data was necessary. Additionally, the permittee expressed that WET testing conditions were incorrectly applied to the outfall since in order to maintain the salinity of the test solutions within the method-specified limits, the samples would be required to be diluted. Finally, the permittee expressed that CORMIX modeling was incorrectly performed for this outfall in the draft preliminary draft permit.

#### PREVIOUS APPROACHES TO ASSESS TOXICITY:

1. Addition of WET monitoring requirements to Outfall 004.
2. Conduct modeling using the Marine Salinity Toxicity Relationship (MSTR) to find a non-toxic critical dilution (CD). Include WET testing in the permit, requiring LOOP to pass at that CD. As done by other facilities (TX SPR permittees- see Attachment A. Part 1), targeting a concentration of effluent that does not yield a toxic effect can be done by flow regulation, which has proven to be a viable WET control mechanism for this type of effluent. Compliance schedule would be allowed.
3. Chemical specific limit in lieu of a WET limit at Outfall 004, as allowed by 40 CFR §122.44(d)(1)(v).

**FOIA ex b(5) - deliberative process**

CURRENT STATUS: Upon request from LDEQ in a call on 5/28/2017, EPA forwarded a copy of a WET lab report from Big Hills (SPR), and the final conclusions from the SPR's MSTR study to LDEQ, so they and LOOP could review. LOOP has expressed disagreement over the inclusion of WET monitoring requirements in the permit. A face-to-face meeting with LDEQ and LOOP has been requested by EPA, but not agreed to at this time.



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